


IN THE SPECIFICATION

Please replace the paragraphs beginning at page 3, line 1 and ending at page 5, line 6 with the following:

SUMMARY OF THE INVENTION

The invention provides a multichemistry measuring apparatus and diagnostic test strips which, in combination with the multichemistry measuring apparatus, provide a multichemistry diagnostic testing system. In one aspect, the invention relates to diagnostic test strips for chemical analysis of a sample. The diagnostic test strips are adapted for use in combination with a measuring apparatus having a test port. The apparatus is capable of performing a multiplicity of testing functionalities. In this aspect, the test strip comprises a support capable of releasably engaging the test port; at least one reaction area on the support for receiving the sample; and an indicator capable of interacting with the test port to select one of the multiplicity of testing functionalities of the measuring apparatus. In one embodiment, the indicator comprises one or more electrically conductive contacts capable of engaging at least two electrically conductive pins within the test port. In such an embodiment, the electrically conductive contacts close at least one circuit between the at least two electrically conductive pins within the test port. In preferred embodiments, the electrically conductive contacts comprise a material selected from: carbon, gold, silver, platinum, nickel, palladium, titanium, copper, or lead. In preferred embodiments, the electrically conductive contacts comprise an electrically conductive printable ink. In another embodiment, the indicator comprises one or more projections or depressions capable of mechanically engaging one or more pins within the test port. In such an embodiment, the mechanical displacement of at least one of the pins results in the opening or closing of at least one circuit. In another embodiment, the indicator comprises an optically detectable pattern capable of signaling to or being detected by an optical detector in the test

port. In preferred embodiments, the optically detectable indicator comprises a pattern formed by a printable ink.

In another aspect, the present invention provides a test port for use in a measuring apparatus that is capable of performing a multiplicity of testing functionalities and is adapted for use in combination with a multiplicity of different types of diagnostic test strips. Each type of test strip corresponds to at least one of the testing functionalities of the apparatus, and at least some types of test strips have indicators of the testing functionality on them. In this aspect, the test port comprises a sensor capable of specifically interacting with the indicator(s) on the test strips, thereby selecting one of the multiplicity of testing functionalities corresponding to the type of test strip. In one embodiment, the indicators on the test strips are electrically conductive, and the sensor of the test port comprises a multiplicity of electrically conductive pins. In such an embodiment, at least two of the pins can be bridged by an indicator, thereby closing an electrical circuit. In another embodiment, the indicators on the test strips comprise projections or depressions, and the sensor of the port is a pin that may be physically displaced by or into the indicators, thereby opening or closing an electrical circuit. In another embodiment, the indicators comprise an optically detectable pattern, and the sensor of the port is an optical sensor.

In another aspect, the invention provides a measuring apparatus having a multiplicity of testing functionalities for chemical analysis. The apparatus is adapted for use in combination with a multiplicity of different types of test strips. Each of the types of test strips corresponds to at least one of the testing functionalities, and at least some of the types of test strips have indicators of the testing functionality on them. The apparatus includes: a test port including a sensor capable of interacting with the indicators on the test strips to select one of the multiplicity of testing functionalities; and a multiplicity of test circuitries for specifically measuring reactions on the test strips, the reactions corresponding to the multiplicity of testing functionalities.
